

**TYLENCHUS GULOSUS KÜHN, 1890: PROPOSED SUPPRESSION
UNDER THE PLENARY POWERS (NEMATODA). Z.N.(S.) 1432**

By P. A. A. Loof (*Landbouwhogeschool, Wageningen, Netherlands*)

The nematode genus *Pratylenchus* was erected by Filipjev in 1936 to include those species of the old comprehensive genus *Tylenchus* Bastian, 1865, that were grouped around *Tylenchus pratensis* De Man, 1880, which species was designated *typus generis*. *Pratylenchus* species being morphologically very similar, great confusion arose during the first half of the twentieth century with respect to taxonomy and nomenclature. The genus was revised by Sher & Allen in 1953. Their work helped a great deal to promote order in the group, but left still some questions unsolved.

2. The following remarks concern the problem of the identity of *Tylenchus gulosus* Kühn, 1890, the species involved being *Tylenchus pratensis* De Man, 1880, *T. gulosus* Kühn, 1890, and *T. penetrans* Cobb, 1917.

History of the species concerned

3. *Tylenchus pratensis* was described in 1880 from the Netherlands. Its identity has been uncertain for a long period, many different species having been synonymized with it in the course of time. Thus Cobb (1927) synonymized it with *T. penetrans* Cobb, 1917; Steiner (1927) with *Aphelenchus neglectus* Rensch, 1924; T. Goodey (1932) with both the above and with *T. coffeae* Zimmermann, 1898 and *T. brachyurus* Godfrey, 1929; Steiner (1932) with *T. gulosus* Kühn, 1890. The first step towards settling the taxonomy of this group was the redescription of *Pratylenchus pratensis* (De Man) by Thorne (1949). Sher & Allen (1953) accepted his interpretation and re-established *P. coffeae*, *P. brachyurus* and *P. penetrans* as valid species, leaving only *T. gulosus* and *A. neglectus* in the synonymy of *P. pratensis*.

4. *Tylenchus gulosus* was described in 1890 by Kühn, and redescribed in 1894 by Fischer from Germany. As far as the writer knows, the name was never mentioned again until 1932, when Steiner synonymized it with *T. pratensis* de Man, under which name, however, he understood the species now known as *P. penetrans* (Cobb). *T. gulosus* Kühn, 1890 has remained in the synonymy of *P. pratensis* ever since.

5. *Tylenchus penetrans* was described from the U.S.A. in 1917. It was synonymized with *T. pratensis* De Man by Cobb (1927) and Steiner (1927); in 1932, Steiner added *T. gulosus* Kühn to the synonymy. When re-establishing *P. penetrans* (Cobb) as a valid species, Sher & Allen (1953) left *Tylenchus gulosus* in the synonymy of *P. pratensis*.

Status of Tylenchus gulosus

6. In his review of the genus *Pratylenchus* (Loof, 1960) the present author came to the following conclusions:

- (a) The original description of *Tylenchus gulosus* is extremely poor and misleading, even taking into account that it was written seventy years ago;

(b) *Tylenchus gulosus* apud Fischer (1894) is not identical with *P. pratensis* (De Man) but with *P. penetrans* (Cobb).

7. Fischer stated that he had this material checked by Kühn, who confirmed the determination as *Tylenchus gulosus*. This, however, does not amount to much, in the light of our present distinctions in the genus *Pratylenchus*. The phytopathological data supplied by Kühn (1890) argue against the conspecificity of Kühn's and Fischer's species. The identity of the former can in no way be deduced.

8. *Tylenchus gulosus* Kühn, 1890, antedates *T. penetrans* Cobb, 1917 and the strict application of the Law of Priority would demand that *T. gulosus* be the valid name for the species, since Fischer's species, a later usage of Kühn, is definitely conspecific with *T. penetrans*. The present writer thinks this undesirable. Although the name *penetrans* had been suppressed as a synonym from 1927 to 1953, it has come into general use since, especially in phytopathological literature, the species being a widespread parasite of many crops and of high economic importance. A very incomplete search in the literature (covering chiefly the Plant Disease Reporter and the Tijdschrift over Plantenziekten) yielded nearly fifty references from 1953 and 1958. The name *gulosus*, on the other hand, seems to have gone into complete oblivion since 1894.

9. The International Commission on Zoological Nomenclature is therefore asked :

- (1) to use its plenary powers to suppress the specific name *gulosus* Kühn, 1890, as published in the binomen *Tylenchus gulosus*, for the purposes of the Law of Priority, but not for those of the Law of Homonymy ;
- (2) to place the specific name *penetrans* Cobb, 1917, as published in the binomen *Tylenchus penetrans*, on the Official List of Specific Names in Zoology.

REFERENCES

- Cobb, N. A. (1917). *J. agric. Res.* 11 : 27-33
Cobb, N. A. (1927). *J. Parasit.* 14 : 71
Fischer, M. (1894). *Ber. phys. Lab. Vers. landw. Inst. Univ. Halle* 3 : 1-11
Kühn, J. (1890). *Jahrb. Deut. Landw. Ges.* 4 : 93-94
Loof, P. A. A. (1960). *Tijdschr. PlZiekt.* 66 : 29-90
Man, J. G. de (1880). *Tijdschr. ned. dierk. Ver.* 5 : 1-104
Sher, S. A., & Allen, M. W. (1953). *Univ. Calif. Publ. Zool.* 57 : 441-470
Steiner, G. (1927). *J. agric. Res.* 35 : 961-981
Steiner, G. (1932). *J. Wash. Acad. Sci.* 22 : 517-518
Thorne, G. (1949). *Proc. helm. Soc. Wash.* 16 : 37-73